§ 98.286

assured values of carbon contents immediately preceding and immediately following the missing data incident. If no quality-assured data on carbon contents are available prior to the missing data incident, the substitute data value shall be the first quality-assured value for carbon contents obtained after the missing data period.

(b) For each missing value of the monthly petroleum coke consumption, the substitute data value shall be the best available estimate of the petroleum coke consumption based on all available process data or information used for accounting purposes (such as purchase records).

§ 98.286 Data reporting requirements.

In addition to the information required by §98.3(c), each annual report must contain the information specified in paragraphs (a) or (b) of this section, as applicable for each silicon carbide production facility.

- (a) If a CEMS is used to measure process CO₂ emissions, you must report under this subpart the relevant information required for the Tier 4 Calculation Methodology in §98.36 and the information listed in this paragraph (a):
- (1) Annual consumption of petroleum coke (tons).
- (2) Annual production of silicon carbide (tons).
- (3) Annual production capacity of silicon carbide (tons).
- (b) If a CEMS is not used to measure process CO_2 emissions, you must report the information listed in this paragraph (b) for all furnaces combined:
- (1) Monthly consumption of petroleum coke (tons).
- (2) Annual production of silicon carbide (tons).
- (3) Annual production capacity of silicon carbide (tons).
- (4) Carbon content factor of petroleum coke from the supplier or as measured by the applicable method in §98.284(c) for each month (percent by weight expressed as a decimal fraction).
- (5) Whether carbon content of the petroleum coke is based on reports from the supplier or through self measurement using applicable ASTM standard method.

- (6) CO_2 emissions factor calculated for each month (metric tons CO_2 /metric ton of petroleum coke consumed).
- (7) Sampling analysis results for carbon content of consumed petroleum coke as determined for QA/QC of supplier data under §98.284(d) (percent by weight expressed as a decimal fraction).
- (8) Number of times in the reporting year that missing data procedures were followed to measure the carbon contents of petroleum coke (number of months) and petroleum coke consumption (number of months).

§ 98.287 Records that must be retained.

In addition to the records required by \$98.3(g), you must retain the records specified in paragraphs (a) and (b) of this section for each silicon carbide production facility.

- (a) If a CEMS is used to measure CO₂ emissions, you must retain under this subpart the records required for the Tier 4 Calculation Methodology in §98.37 and the information listed in this paragraph (a):
- (1) Records of all petroleum coke purchases.
 - (2) Annual operating hours.
- (b) If a CEMS is not used to measure emissions, you must retain records for the information listed in this paragraph (b):
- (1) Records of all analyses and calculations conducted for reported data listed in \$98.286(b).
- (2) Records of all petroleum coke purchases.
- (3) Annual operating hours.

§98.288 Definitions.

All terms used in this subpart have the same meaning given in the Clean Air Act and subpart A of this part.

Subpart CC—Soda Ash Manufacturing

§98.290 Definition of the source category.

- (a) A soda ash manufacturing facility is any facility with a manufacturing line that produces soda ash by one of the methods in paragraphs (a)(1) through (3) of this section:
 - (1) Calcining trona.

Environmental Protection Agency

(2) Calcining sodium sesquicarbonate.

(3) Using a liquid alkaline feedstock process that directly produces CO₂.

(b) In the context of the soda ash manufacturing sector, "calcining" means the thermal/chemical conversion of the bicarbonate fraction of the feedstock to sodium carbonate.

§98.291 Reporting threshold.

You must report GHG emissions under this subpart if your facility contains a soda ash manufacturing process and the facility meets the requirements of either §98.2(a)(1) or (a)(2).

§98.292 GHGs to report.

You must report:

(a) CO₂ process emissions from each soda ash manufacturing line combined.

(b) CO₂ combustion emissions from each soda ash manufacturing line.

(c) CH_4 and N_2O combustion emissions from each soda ash manufacturing line. You must calculate and report these emissions under subpart C of this part (General Stationary Fuel Combustion Sources) by following the requirements of subpart C.

(d) CO_2 , CH_4 , and $\mathrm{N}_2\mathrm{O}$ emissions from each stationary combustion unit other than soda ash manufacturing lines. You must calculate and report these emissions under subpart C of this part (General Stationary Fuel Combustion Sources) by following the requirements of subpart C.

§ 98.293 Calculating GHG emissions.

You must calculate and report the annual process CO_2 emissions from

each soda ash manufacturing line using the procedures specified in paragraph (a) or (b) of this section.

(a) For each soda ash manufacturing line that meets the conditions specified in $\S98.33(b)(4)(ii)$ or (b)(4)(iii), you must calculate and report under this subpart the combined process and combustion CO_2 emissions by operating and maintaining a CEMS to measure CO_2 emissions according to the Tier 4 Calculation Methodology specified in $\S98.33(a)(4)$ and all associated requirements for Tier 4 in subpart C of this part (General Stationary Fuel Combustion Sources).

(b) For each soda ash manufacturing line that is not subject to the requirements in paragraph (a) of this section, calculate and report the process CO_2 emissions from the soda ash manufacturing line by using the procedure in either paragraphs (b)(1), (b)(2), or (b)(3) of this section; and the combustion CO_2 emissions using the procedure in paragraph (b)(4) of this section.

(1) Calculate and report under this subpart the combined process and combustion CO₂ emissions by operating and maintaining a CEMS to measure CO₂ emissions according to the Tier 4 Calculation Methodology specified in \$98.33(a)(4) and all associated requirements for Tier 4 in subpart C of this part (General Stationary Fuel Combustion Sources).

(2) Use either Equation CC-1 or Equation CC-2 of this section to calculate annual CO_2 process emissions from each manufacturing line that calcines trona to produce soda ash:

$$E_k = \sum_{n=1}^{12} \left[\left(IC_T \right)_n * \left(T_t \right)_n \right] * \frac{2000}{2205} * \frac{0.097}{1}$$
 (Eq. CC-1)

$$E_k = \sum_{n=1}^{12} \left[\left(IC_{sa} \right)_n * \left(T_{sa} \right)_n \right] * \frac{2000}{2205} * \frac{0.138}{1}$$
 (Eq. CC-2)

Where:

 $E_k = \mbox{Annual CO$_2$ process emissions from each } \\ \mbox{manufacturing line, } k \mbox{ (metric tons)}.$

 $(IC_T)_n$ = Inorganic carbon content (percent by weight, expressed as a decimal fraction) in

trona input, from the carbon analysis results for month n. This represents the ratio of trona to trona ore.

 $(IC_{sa})_n$ = Inorganic carbon content (percent by weight, expressed as a decimal fraction)